



CALIFORNIA GARDEN

IN THIS NUMBER

THE ANNUAL MEETING
STATE PARKS IN SAN DIEGO COUNTY

By the Editor

THE MISSION BELLS OF RANCHO SANTA FE

By Ruth E. Nelson

JULY, 1930

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— Proprietors —



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No. 1

THE ANNUAL MEETING

TRIBUTE PAID TO MRS. GREER

A well deserved tribute was paid to President Mrs. Mary A. Greer at the annual meeting of the Floral Association, held June 17th, by R. R. McLean, who spoke on behalf of the Board of Directors of the Association.

At the close of Mrs. Greer's annual report Mr. McLean asked for the floor and stated that although he was speaking for the Board of Directors especially, he was sure he correctly interpreted the sentiment of every member of the Association when he said that Mrs. Greer was undoubtedly the best President any Floral Association ever had; that the success of the Association Flower Shows during the years of her leadership had been largely due to her untiring energy, foresight and ability to get other people to work with her.

Mr. McLean further stated that the success of the various projects sponsored by the Association in addition to the flower shows, as in the matter of garden contests, garden visits and other affairs of value and interest to the flower loving part of our community, was largely measured by the enthusiasm and hard work put into them by President Greer.

FLORAL ASSOCIATION OFFICERS

ELECTED

The recently elected Board of Directors held their first meeting Wednesday afternoon, June 25th, 1930, at the Chamber of Commerce, Directors present being, Mrs. Mary A. Greer, Miss Alice Halliday, Miss K. O. Sessions, Mr. Walter Birch, Mrs. Robt. Morrison and Mr. Robt. R. McLean. On motion the President, Mrs. Mary A. Greer, the Vice-President, Mr. Walter Birch, the Treasurer, Mr. John Bakkers, and the Secretary, Miss Winifred Sinclair, were unanimously re-elected.

Mr. S. B. Osborn was re-appointed Editor of the California Garden Magazine by unanimous vote, as was the Assistant Editor, Mr. John Bakkers, also.

President Greer was given power, by unanimous consent, to appoint the Program and House Committees.

REPORT OF THE ANNUAL MEETING

The annual meeting of the San Diego Floral Association was called to order by the President, Mrs. Mary A. Greer, Tuesday, June 17th at 7:30 p. m. Reports submitted by the Secretary, Miss Winifred Sinclair, the Treasurer, Mr. John Bakkers, together with the President's message appear elsewhere in this issue. Reports were also received from the Garden Contest Chairman, Mr. Paul Tuttle, and the Chairman of the State Parks Committee, Mr. Robert R. McLean. The endorsement of the \$570,000 bond issue for State Park sites in San Diego County was voted by the Association. It was pointed out that months of hard work by competent citizens resulted in the present plans, which include three definite sites, one at Palm Canyon in Borego Valley, one on Palomar Mountain and a beach site on the Coronado Strand. Still another, an estuary and beach site in the northern end of the county, will soon be added. In support of this bond issue it was stated that the State will match dollars with the county and even though we do not vote county funds for this purpose we still must pay our half without receiving any benefit in this county, a six million dollar bond issue for that purpose having passed at the last state election. After a brief report by the Editor, the election of Directors took place. The results appear elsewhere in this issue. Mr. Robert R. McLean eulogised our President, Mrs. Greer and a rising vote of thanks was given her for her untiring efforts in behalf of the Association.

Mrs. Robert Morrison spoke briefly of her trip to Hawaii, particularly stressing the beauty of the avenues of beautiful flowering trees in Honolulu.

Miss K. O. Sessions was on hand to identify and describe botanical specimens among which were the following: *Beaumontia Grandiflora*, *Crinum Americanum*, *Thalictrum Dipterocarpum* and various cactus blossoms. To those of you who have listened to her animated descriptions no comment is necessary, while to those readers who are denied the pleasure of hearing her, anything one might say would be wholly inadequate to portray her inimitable entertainment on these occasions. As usual excellent refreshments were served by the house committee following adjournment.

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GLIMPSES BACKWARD AND FORWARD

By Mrs. Mary A. Greer

President of the S. D. Floral Association

On this, our birthday, may we take a backward glimpse to the time, when twenty-three years ago, a band of congenial men and women, held together by the common bond of garden lore, met and founded this our Association. Many of that original group are still active members, Mr. Robinson, the founder President and first Editor of The California Garden, Mr. George Marston, Miss Sessions, Dr. and Mrs. Gearhart, Miss Matthews and many others. The ideals set by the founders were individual advancement of garden skill and knowledge and civic betterment in the furtherance of community beauty. It is the striving towards these ideals which has kept us steadily working all these years. There is a beautiful democratic atmosphere to our Association, a lack of any commercial spirit or selfish feeling, which is perhaps the keynote of our steady growth.

This last year has been an especially fruitful one in three respects; the working out of the iris section, the garden contest, and the delightful Wister lecture. But aside from these and the many features mentioned by our secretary, Miss Sinclair, there seems to be an awakening in the community, in the local press, and in civic organizations to the scope of work accomplished by our organization, and the possibilities for our influence to be felt locally.

I wish to speak of the fine work done by the various board members, and committee chairmen and the splendid spirit of co-operation amongst all our members. Whenever we have asked for help the willing spirits and hands have been right there to aid us with our tasks. There is always much to do, happy tasks and tasks not so happy. May I say that in the coming years there will ever be work suited to all. We need helpers always and always.

In conclusion, may I say that although the year drawing to a close has been a pleasant and rewarding one, let us in the new year, push our ideals ever a step ahead, so that the accomplishment will never be right at our touch, but at all times be just in view around the bend of the garden path. And so to your incoming President and Directors, remains the task of carrying out these ideals.

ATHLETE PLANTS

Climbing seems to be the most popular of all plant athletics, for so many engage in it. But there are great differences in their methods. Some plants will catch at anything, preferring light to darkness, while the Virginia creeper, for instance, has little sticky feet on its tendrils. These tendrils sensitively seek the dark crevices or nooks.

**SECRETARY'S REPORT FOR THE YEAR
ENDING JUNE 17th, 1930**

The San Diego Floral Association has just ended its 23rd year of existence. Financially the Association is not in as flourishing a condition as in the last two years, but its spirit is undaunted and this next year it hopes to far surpass all previous years.

An average of ten new subscribers or members has been maintained throughout the year. The California Garden, the official organ of the Association, travels to all parts of the world and is most enthusiastically received.

The meetings have been unusually well attended, the programs being both interesting and instructive. A feature of the meetings which all anticipate with pleasure is Miss Sessions' identification of specimens brought in for that purpose. The social hour following the program is also most enjoyable, giving the members an opportunity to exchange gardening experiences and to become better acquainted.

Among the speakers at the meetings were Mr. A. D. Robinson of Rosecroft, who opened the year's program by a talk on begonias; Miss K. O. Sessions who showed pictures of Honolulu and explained the flora of that region; Mr. Fred McNabb who gave suggestions on fall planting; Mr. Walter Merrill whose account and pictures of Mexico were most interesting; Mr. Paul Avery who talked on Rock Gardens, illustrating with beautiful pictures; Mr. R. R. McLean who gave a most interesting and instructive talk on the Mediterranean Fruit Fly; Mrs. Armand Jessop who showed pictures of her trip around the world, and Mr. Requa who showed his Mexican pictures.

One meeting was in charge of the Iris Section which was formed during the year, and most delightful talks were given by Mr. Herbert Evans, Mrs. Wight and Mrs. Tuttle.

The Association has been entertained in the gardens of Mr. and Mrs. Robinson, Mrs. Braun, Mr. and Mrs. Elliott, Mr. and Mrs. Marston, Miss Lee, Mrs. Batten, Mr. Harry Morgan, Mrs. Evans, Mrs. Treadwell and Mrs. Dorland. These monthly meetings are most enthusiastically attended.

The annual bridge tea was held in November and was most successful.

The Fall Flower Show held in August in quality and arrangement maintained its usual high standard but the attendance was much smaller.

The Spring Flower Show, April 26th and 27th, was one of the loveliest and most successful shows ever held here.

In addition there was a Chrysanthemum Show in November and a Berried Shrub display in December.

In January Mr. Robinson, who was Editor

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of the Garden, tendered his resignation. This was regretfully accepted. Mr. S. B. Osborn was appointed in his place.

One of the outstanding events of the year was the lecture by Mr. John C. Wister of Philadelphia, President of the American Iris Society, who came to San Diego under the auspices of the San Diego Floral Association.

A new activity of the past year was the sponsoring of a Garden Contest which was most successfully completed, and this spring a new contest has been begun.

To the President, Vice-President, Board of Directors and Treasurer the Association gives its thanks and appreciation for the services of the past year. The House Committee too has done their part in successfully caring for the Hall, arranging for refreshments, etc.

Mrs. Greer, our president, has worked unremittingly, always putting the interests of the Association first, regardless of time and effort. To her the Association extends its heartiest thanks.

DIRECTORS ELECTED AT ANNUAL MEETING

Mrs. Mary A. Greer
Miss Alice Halliday
Mrs. Robt. Morrison
Miss Kate O. Sessions
Mr. Robt. McLean
Mr. John Bakkers
Mr. Walter Birch
Nominating Committee
Mrs. C. W. Darling
Mrs. Oscar Quarforth
Mr. Alfred Mitchell

JULY MEETING

The regular monthly meeting of the San Diego Floral Association will be held in the Floral Building, Balboa Park, on Tuesday evening, July 15th, at 7:30. The speaker will be Mr. W. K. Morrison, who has traveled extensively in South America, the Mediterranean countries and Africa for the British Agricultural Department. Mr. Morrison will talk on tropical fruits and flowers, which can be grown in this climate.

NEW MEMBERS AND SUBSCRIBERS

Miss Alice R. Kendall, Portland, Oregon.
Mrs. Chas. Hon, San Diego.
Mrs. Pearse, San Diego.
Mrs. C. W. Ragland, San Diego.
Mrs. John Metzger, San Diego.
Winston Langdon, Chula Vista.
Miss Cynthia Diggs, South Pasadena.
Mrs. Daniel Murphy, Los Angeles.

TREASURER'S REPORT FOR YEAR ENDING JUNE, 1930

Receipts	
Balance on hand June, 1929.....	\$ 320.99
Received since on account of:	
Memberships	\$ 651.00
Subscribers	385.95
Advertising	287.60
Sales	60.80
Miscellaneous	198.25
Silver Offerings, etc...	17.16
Flower Shows	1,084.60
	<hr/>
	\$2,685.36 \$3,006.35
Total to be accounted for	\$3,006.35
Disbursements	
Expense of Flower Shows.	\$ 684.76
Monthly Meetings	54.33
Publication of California	
Garden	1,492.80
Subscription to Floral	
Magazines	12.50
Current Expense	710.62
Furnishings	1.25
	<hr/>
	\$2,956.26
Balance on hand.....	\$ 50.09

You will note that this Society finished the year with \$270.90 less in its treasury than it had when it began its year in June 1929. There are many items of expense which caused this, such as paying for the bronze plaques for the winners in the Garden Contest—a deficit account of the Wister lecture—and a few other items.

Your Board of Directors have discussed this situation at their board meetings, and decided to bring the matter before the members at this annual meeting.

What is the desire of the members regarding this situation?

John Bakkers, Treasurer.

The Association voted to increase the dues to one dollar. (Editor.)

Mr. Barnhart very kindly corrected my spelling of *Chimaphila*. I claim no great knowledge of botanical names and attached the name to the plant as it was given my by the nurseryman from whom I bought it. As to the species being unknown to Jepson or Grey, it is not surprising, but the *Maculata* C. is listed corresponding to my description in Bailey and Sir Joseph Paxton, both of whom, I am informed, are considered higher authorities, and the later authorities also list a white blooming *Maculata*, as well as the pinkish one. It is also listed for sale by Gillette, the celebrated native plant dealer of the east.

—Mrs. Thomas.

REPORT OF JUNE GARDEN MEETING

On June 4th a large number of garden lovers visited the garden of Mr. and Mrs. K. R. Battin. The charm of a sheltered, spacious garden is especially enhanced in a climate where one may live in the out-of-doors so much of the year as in San Diego. Mr. Battin's garden is attractive in its arrangement for comfortable enjoyment of the open. The vine covered pergola and trellis on the west protect the garden from the forceful ocean breezes, at the same time providing shady nooks and cozy corners. Indeed a very marked feature of this garden is the generous distribution of "comfy" spots for sitting, reading, sewing, chatting and for quiet or sociable living.

Flowers, shrubs, vines and trees evidenced themselves in much the same easy and leisurely manner as the "comfy" places—in other words, the garden is not formal but rather a decidedly comfortable living place.

Beside the many varieties of flowering annuals and perennials, perhaps the most conspicuous was the large Parkinsonia tree under which Mrs. Quarforth served punch and cakes forgetting that it was not the usual monthly meeting of the Floral Association but remembering that the afternoon was warmer than usual.

An interesting quince tree attracted attention on account of its beautiful foliage and growing fruit. An apricot tree gave a fine display of leafage as well as of growing fruit. As we looked at these attractive fruit trees we wondered why fruit trees are considered a kitchen-garden tree? Is not the beauty of beautiful foliage and growing fruit equal to the beauty of scraggy cone and pine needles?

Mr. Harry Morgan's garden was visited the same day. When one sees what a person can do with a garden for an avocation and not as a vocation one is tempted to say, "Why aren't more of us doing what Mr. Morgan does? We leave the answer for your solution. Such a clean, well ordered flourishing, happy and contented looking lot of begonias we have not seen before outside Mr. Robinson's lath houses. In Mr. Morgan's lath house were many tuberous begonias but we were a bit early in our visit for much of a showing in blooms. Still the promise was in evidence. There were fine specimens of fern, also a small fern tree growing in the lath house. Mr. Morgan had arranged many jars of rooted begonias as presents for the guests. By the smiling faces of those who carried one away we are sure the plants received a glad welcome in many gardens. We hope the begonias will be as happy in their new homes as they seemed to be in Mr. Morgan's lath house and we also hope they will make a favorable report to Mr. Morgan in way of blossom by next season at least.

Perhaps next to the pleasure of having a fine

garden comes the pleasure of sharing it with others. We trust that this is so, because all of us so enjoy visiting lovely gardens and dreaming about them afterward.

—C. E. M.

WATER LILIES

Some of the newer varieties are now coming into bloom. Amethyst has just opened and it is absolutely true to name. It is one of the leaf growers, a seedling of Panama Pacific but larger flower and the new plants form when the parent is young. James Brydon is not so new but still is not much known. It is a rich rosy crimson, very free to bloom, and leaves are bronzy red. The growth is medium and makes it quite adaptable to the smaller pools. Masaiello is a vigorous plant, with flowers a lovely pink shading to light pink sepals and quite fragrant. Somptuosa is a gorgeous flower, very large, opening out a medium pink and gradually changing to a deep pink. Leaves are fair size but growth is compact. Gladstone is a beautiful white, blooms freely and early in the season, and also opens early in the morning.

For the small pool the Pink Ladyker is striking in its creamy pink. There is also the Carmine and the White Ladyker which take small room. Chrysanta and Aurora come in the sunset shades, deepening to reds and are small compact little beauties. But if you have room in the pool, try the Sunrise. It is the largest of hardy lilies 10 to 11 inches across, crepe-like yellow pointed petals and makes a grand showing almost the whole year. It blooms very early in the spring, opens early in the morning, and does not close till long after every other lily is sound asleep. And another advantage is that the leaves, though large, do not have the long stems of most all the other vigorous large lilies. All the Tropicals are noted for their large long stemmed leaves, but one can accommodate them to a medium pool by keeping outer leaves cut off. And they are all so delightfully fragrant, and many have a distinctive odor of their own. Blue Triumph seems to be the strongest, with August Koch a close second. Mrs. Whittier is a peculiarly different enticing odor, and a handsome sky blue a foot across. Mrs. Wilson is some smaller in growth, very fragrant and a little deeper blue. The tropical lilies are all hardy in San Diego, that is, according to the catalogs, and they will prove so, in an ordinary fair-sized pool of good depth. Mrs. Whittaker is the first of them to sulk after a cold winter. But if you are doubtful, stick to the Star Lilies, they will never fail you. And they come in rose, purple, pink, red and blue. Another good quality is that they increase rapidly. Also show well by standing one foot above water.

—Mrs. W. S. Thomas.

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The July and Aug. Gardens

By Walter Birch

THE GARDEN

The next two or three months call for more close attention to the commonplace and, in some respects, less attractive details of garden work than at other seasons of the year. I mean the keeping ahead of the various garden pests that are so ruinous to our plant life and the proper and thorough care of the soil and moisture so essential to the well being of our trees, shrubs and flowers, which we have (perhaps) so far brought along in a satisfactory manner.

There are simple and effective remedies for practically all of our garden pests, if used before the trouble has gone too far, and they are so well known that I shall not enumerate them here. However, if you want information along these lines, ring up or call on our efficient Horticultural Commission or any reliable seedsman in San Diego and get the "dope" on these matters, because your success in the garden depends largely on your success in checking the various fungus diseases and insect pests that are constantly preying on your favorite plants, so do not delay, do it now!

Regarding the care of the soil, irrigate and cultivate deeply, using judgment and care so as not to disturb or injure the fibrous roots by getting too close to the plants, bulbs or trees. For most of the larger plants, dahlias or mums for instance, use furrows or basins, and basins for trees or shrubs, giving time for a thorough soaking and using a mulch of well rotted manure, humus or Groz-It.

The rose bushes are having a rough time of it this year, and I notice that, our real rosarians are calling for Fungtrogen spray, many of them using it by the gallon.

If you have neglected the spraying or dusting of your plants, until they have become badly affected with mildew or rust, etc., it will save you time and trouble if you will carefully go over the plant and remove all badly affected leaves or twigs, taking care to burn same, and then thoroughly treat the plant, repeating the dose occasionally, and you will be rewarded by having clean plants that will produce high class flowers if you treat them well with regard to moisture, cultivation and fertilization. But remember that no matter how well you treat your plants in other ways, and neglect the pests, you cannot have satisfactory flowers, fruits or vegetables.

Asters, Chrysanthemums and Zinnias, three

favorite flowers that do so well here, will stand a little encouragement in the way of a goodly supply of moisture, fertilization and probably a spraying or two of Bordeaux Mixture for blight and rust, and if they are bothered with thrips use Black Leaf "40".

Thin out your violet bed and work in a little leaf mold, and see that your potted plants get enough water to keep up a uniform moisture, not flooding today and then neglecting them for a week. Get an occasional 25c or 50c package of bone meal or some safe fertilizer at your seed store and apply a little to your favorite plants, and see what a difference it will make.

Don't neglect the lawn now but give it plenty of water, and another going over with fertilizer, and see what a lovely sheet of green you will have during the hot summer weather, instead of the rather nondescript color many lawns show during the summer months.

It is now getting near the time to give your rose bushes a rest, go over them lightly with the pruning shears and if they are in need of spraying for fungus or insect pests use a little Fungtrogen, or Volck adding a little Black Leaf "40".

Cut down on the watering just giving enough to keep them from drying out or seriously checking them, and then by generous treatment and pruning as winter approaches you will be rewarded later on by vigorous growth and blooms. Plant seeds of Mignonette, Pansy and Stocks for winter and spring, also Cinerarias, those wonderful flowers the size and quality of which have been so wonderfully improved the last few years. Set out plants of asters and Zinnias, they will give you lots of blooms later on, also Marigold and Petunias, the fringed and semi-double petunias are particularly worth while. Get your ground ready for sweet pea sowing by deep spading and liberal application of well rotted manure, to be gone over again next month before sowing, and remember that early bulb planting will soon be here, so make your plans.

REQUEST FOR BACK NUMBERS OF CALIFORNIA GARDEN MAGAZINE

To complete the files of the Floral Association library a request is made for copies of the July, 1911, issue. Who can assist us?

The California Garden

Editor
Silas B. Osborn
Associate Editors
John Bakkers
Walter S. Merrill

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Mr. Walter Birch, Vice-President
Mr. John Bakkers, Treasurer
Miss Alice Halliday
Mrs. Robt. Morrison
Mr. Robt. R. McLean
Miss K. O. Sessions
Miss Winifred Sinclair, Secretary.
Phone, Bayview 0202.

Members

California Rose Society, American Gladioli Society,
American Iris Society

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EDITORIAL

STATE PARKS IN SAN DIEGO COUNTY (Desert, Mountain and Sea)

BOREGO VALLEY PALM CANYON. One April morning of this year by auto we wended our way slowly down Foster grade from Julian on an excursion to the Borego Valley State Park site. To the left Vulcan Mountain reared its mist shrouded summit. Above a gentle wind whistled melodiously through the pines. The winding road was lined with light blue ceanothus intermingled with bright yellow bush poppies. Although the sky was overcast, far below, the desert valley was bathed in sunshine. At Banner a stop was made to fill canteens with clear cold spring water. Soon San Felipe was reached and coats were doffed under the persuasive warmth of the morning sun. The heavy brush growth of the higher altitudes rapidly gave way to typical desert vegetation. Junipers, mesquite, greasewood and desert wild flowers of varied hue, chollas, opuntias and other cactus. Soon gasps of sheer delight were occasioned by the sight of glorious ocotillos in the prime of their scarlet glory. What is

that purple flower? An opuntia of some kind we venture. Reaching the Narrows we swing to the left and soon reach Borego Post Office. Here some of the native flowers have been brought in for display. A desert lily, who would expect to see a lily blooming in the desert? Pressing on, Beatty's Ranch was soon reached. Leaving our car we hike up to the palms. Their tropical verdure is astounding in this dry desert valley. Moving up the canyon from one group of palms to another, fatigue is forgotten in the silent admiration of this natural phenomena. One might be in the tropics. The trip back is as interesting as it was coming for new discoveries are constantly being made. After a lunch beneath the palms, we stretched out in the shade and leisurely analyzed our mental reactions. In a lukewarm abstract way we have favored conservation of natural beauty as many people do. Believing in conservation we have supported the prohibition on picking wild flowers, cutting sprays of flowering native shrubs and gathering cactus, but the sight of the blooming Ocotillos, the native palms, ceanothus and wild flowers turned our mild interest into militant enthusiasm. The natural beauty of our back country must be preserved from wanton destruction by encroaching civilization, if unnecessary obliteration might so be termed.

PALOMAR. Driving from Ramona towards Palomar recently at Witch Creek we passed through fields of Mariposa tulips springing up by the thousands where devastating brush fires raged last fall. Santa Ysabel and the Indian Mission are passed and soon we are purring along beneath the sheltering live oaks. Turning to the left at the cross-roads Lake Henshaw is soon revealed glittering in the morning sun. Large white waterfalls contrast sharply with the blue waters of the lake. As the dam is passed we start upgrade on Palomar Mountain. Grey moss hangs in sheets from ancient gnarled live oaks and wild flowers line the road. Higher and higher we climb till we reach the first pines, then fields of fern brakes and oaks, spruce, incense cedar are all around us. At last we reach Oceanview and look down on the broad Pacific with the billowing waves breaking row on row. The fragrance of the conifers mingles with choke cherries, and dogwood. A sparkling brook gurgled noisily down the mountain where we stopped to spread our lunch. At last we discover the azaleas we have been looking for. They are just bursting into bloom and their dainty beauty is unrivalled among the mountain flowers. Here again we feel that same urge to preserve if possible the natural beauty of our surroundings.

CORONADO STRAND. The day has been warm in the back country and the very thought of the cool seashore intrigues one. Leaving La Mesa at five-thirty we drive to San Diego and

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take the ferry and soon are speeding along the "Silver Strand." Yellow primroses carpet the ground, yuccas, rhus and other natives are all about us. At last we reach our usual parking place and pack our things down to the beach. Combing the beach for firewood we are well rewarded and seat ourselves for our supper. The much maligned hot dog tastes like chicken when toasted over the hot coals. We lie back on the sand after eating and are lulled into mental relaxation by the roar of the surf. The sun is just sinking below the horizon and lights are beginning to twinkle at La Playa against the dark bulk of Point Loma. A belated fishing boat is rushing to reach the haven of the harbor before dark. As darkness envelops us other campfire beacons are seen lining the beach. Gasoline lights are in evidence where some ardent Isaac Waltons are casting their fishing lines in the surf. Far out at sea some battle-ships are playing at war. The flash of their guns is seen together with the blinking of their code messages from the bridge. The sea roars increasingly and the cares of a sultry day with its petty aggravations are completely erased.

These simple experiences just related justify to the writer his support of the coming bond issue for State Parks in San Diego County. It is not unreasonable to believe that if we fail to take advantage now of the opportunity to secure forever these natural playgrounds, opportunity may never knock again. For with the rapid development of real estate in Southern California, these natural recreational park sites may soon be developed by private enterprises resulting in destruction or at least restriction, if we fail to purchase them now. Shall we soon drive out on a holiday's outing to be met at our destination with a ticket office? I sincerely hope not. You can safeguard yourself and posterity by voting for the "County State Park Bonds."

An Odd Central American

From the wilds of Central America comes *Beloperone tomentosa*, an odd but attractive bush growing to three or four feet. The ever-green foliage is not particular striking, but it is good-looking at all times. The oddness is apparent in the flowers. Have you ever seen the eggs of the Katydid laid on a limb in symmetrical fashion, one over the other? That is the way the flowers of the *Beloperone* looks. The flowers themselves are inconspicuous, but, like the *Bougainvillea*, they have quite showy bracts, and there are two rows of these bracts hanging in a drooping raceme several inches long, each bract overlapping the other in peculiar fashion, the color being an unusual shade of rosy purple. It does best in a somewhat sheltered position where it has partial shade, and while it is not particularly tender, it should not be planted in cold situations.—J. A. A.

FACTS ABOUT STATE PARKS IN SAN DIEGO COUNTY

By William T. Hart

Pres. State-County Parks and Beaches Ass'n
of San Diego County

A bond issue of \$570,000 will be submitted to the voters of San Diego County to match an equal amount provided by the State. This will only mean about 45 cents per year on a property valuation of \$5000.

Three definite park sites have already been named by the Park Commission and efforts are now being made to secure a definite location for the estuary and beach in the very near future so that the amount allotted for each site will be shown on the ballot.

The tourist business is one of the best sources of revenue we have in California and exceeds 233 million dollars per year. This can be greatly increased if we can furnish Parks and Playgrounds for our tourists. In an analysis of how the money is distributed that tourists leave in the country we find six cents out of every dollar goes to taxes, so that item should take care of the cost of our half of the cost of State Parks and instead of being a liability it will turn out to be a very valuable asset and a profitable source of revenue. When roads and other improvements are built by bond issues they are worn out by the time the issue is paid out but by acquiring park sites at present prices the State and County will have something that will be worth many times the amount it cost when the bonds are paid out and the extra tourist trade will take care of the cost of purchase in the meantime.

The cost of developing and maintaining the parks will be borne by the State and the amount of bond issue can only be used for the purchase of the sites.

PALM STARCH

Pearl sago is a form of starch, much like tapioca, and forms a food very easy of digestion. It does not come from roots, tubers or seeds, as much starch does, but from palms.

The sago palm grows on swampy ground along the coasts of East Indies. For 15 years it grows, making a stout trunk topped by a crown of feathery leaves, and does not flower. The pith of the trunk has a thick rind, and, upon maturity, is fairly bursting with starchy material. This is the tree's reserve food for its flowering. If allowed to go on and flower, fruit and seed, the palm dries to a hollow shell and dies. Just when the stem is most loaded with starchy pith, it is cut down. The rind is scraped of all pith, which is grated to a pulp. After this, through water process, starch is separated and made into cakes. Later, it is worked up into a paste and made into tiny bits as we see them.—C. D. B.

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FUCHSIAS AGAIN—AND SOME MORE

I was informed that Mr. Hugh Evans of Santa Monica possessed 57 varieties. The statement came from his gardener, Mr. Harry Clark who "visited my Fuchsias" two weeks ago. Therefore, of course, a trip to Santa Monica was obligatory.

Many of you have been there and know what a beautiful, interesting display five acres of flowering shrubs will make—nine hundred varieties—all choice and rare. But to get back to our subject, I found seven new Fuchsias to add to my collection and Mr. Clark found seven in mine which were new to them, and we both added one more new one, of the Fulgens type, from Miss Sessions' garden. If these varieties increase ad infinitum as the Fuchsia Society members visit each other, where will it end? Who cares, as long as we keep happy by finding new treasures.

A most handsome specimen in Mr. Evans' garden was a large tree-like *Corymbifolia*—the tubes 4 inches long, pinkish white and the petals white. Several of us have the red *Corymbifolia* blooming, and possessed small plants of the white but I had not before seen the bloom. Another interesting Fuchsia was the *Lycioides*. The blossoms were small—two shades of red but the beauty of the plant was its shape—symmetrical, compact, and it will grow eight to ten feet high. Also will do well in the sun, which as you know, is not common in that family, although the *Triphyllas* and the creeping *Procumbens* also need some sun. One new variety, Minnesota, has just bloomed in my garden. It is single, a large beautiful distinct coloring, the corolla deep carmine shading lighter toward the base, and the sepals large thick waxy white, the tube also a waxy white and very full. Another gorgeous single one is the Beauty of Exeter. It has most striking sepals of a salmon-cerise color with a semi-double center of cerise, and full open blossoms are four inches across.

Mr. Robinson is absolutely correct as to Bridge parties of the Thrips—that is, the invitations are already out but we put out Isolation cards composed of a spray of Volck and Nicotine, and the visitors are only a few who find entrance through the back door. I wrote my son in New York that I had fifty varieties. The answer came thus, "I do not doubt it, knowing your veracity, but my friends looked inquiringly when I told, a year ago, that you had fifteen. I do not dare trust the question of my own veracity by stating you have now fifty." But I have that number **proven** by the blossoms, with an additional seven still holding a question mark on their tag until they show their colors. And since "The proof of the pudding, etc." is always true, I invite you—Come and see.

Why not come in with us? The American Fuchsia Society was formed last November at Berkeley with membership admission only \$1.00. You will receive all available information as to hybridizing, growing, etc., and will also receive gratis new varieties and seeds as they are collected by members.

The well known Sydney Mitchell is now in Europe with a franchise permitting him to send back all new kinds he discovers. One important object of the Society is the fixing of the names which are now so confused. The President, Prof. Wm. Ewing, wrote me that at a meeting in Berkeley last month there were several varieties of specimen blooms brought in under four and five different names. A scientific botanist is now working on this problem. All members are now sending in our specimens to her, and we expect soon to have established names.

Miss Sessions, or myself, will most gladly forward your name. Or you may mail the money and application to Mrs. Evelyn Steele Little, the Secretary at 1175 Colussa Avenue, Berkeley, California. We already have a goodly number in San Diego, but we want more, for mutual benefit.

Mrs. W. S. Thomas.

DEVIL'S THREAD

This is the dodder, and one of the worst robbers in the plant world. The dodder has no green coloring-matter, or chlorophyll, in its body and therefore must be a robber to live and eat. This plant has no leaves, only a few small scales, probably remnants of lost leaves. Seed germinates in soil like that of honest plants, but soon the delicate vine commences to reach up for aid. Soon as it can touch another plant, it immediately attaches itself by means of suckers. When a firm hold is obtained on a nice healthy plant, the dodder begins to wither near the ground and finally breaks connection with the earth.

Thus the dodder twists and crawls over heads of other plants like a snake, binding them fast with its vampire suckers and flourishes at their expense, feeding directly from them.

The flowers are in clusters of bell-shaped blossoms, and are of a pale, whitish hue.—C. D. B.

Jumping Beans are seeds of the fruit of a small shrub to be found in Mexico, Central and South America. They are triangular in shape and dance or jump about, rolling from side to side, for about six months. This commotion is caused by a flat worm inhabiting each bean. As he grows he cuts a door in his little house and spins over it a throw of silk. When this is finished, he curls up for his last sleep, upon awakening from which, he is a lively gray moth.—C. D. B.

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LATH HOUSE MATTERS

By Alfred D. Robinson

Last month I maundered some about that pet scheme of the most humane Mikado to make the punishment fit the crime, but I find myself absolutely compelled to return to it now for I have found a most beautiful example and in order that the reader may fully enjoy it I incorporate intact the item from the Florists' Review.

Glue For Insects

"Several years ago it was demonstrated that glue would kill red spider on evergreens. Tests at Ohio State University, Columbus, show that glue will act likewise on carnations, snapdragons and many other plants in the greenhouse. It acts by cementing the insects to the foliage, causing slow death to the adults and preventing the eggs from hatching. It is non-injurious to foliage, cracking off upon drying and leaving the pores free to function as usual. The killing of red spiders, mites, thrips and aphids has been accomplished.

The dosage is as follows: Dissolve one pound of powdered glue in five gallons of hot water. Cool and spray thoroughly so as to cover the insects. In a day or two, apply a fine syringe to the foliage; the glue becomes softened and a second killing is made. The spray is cheap and effective.—Alex Laurie."

No! I have not tried it, I am so afraid that it might not work and I want to gloat for a while while the gloating is good. Consider the delightful finesse of that second glueing.

I quit the surgical instrument racket because my nerves frayed at being confronted day after day with the abnormal and diseased and imagined that a life among the flowers would be the right thing in the case, but now folks bring me their sick plants for diagnosis and prescription and what is worse they frequently fetch along dismembered limbs and raped leaves. Only a day ago a bang on my gong brought me right up against a most dejected tuberous Begonia its growth was stunted and blue grey, it rested unhappily in a dry expanse within a much too large pot. The lady who bore it thrust it at me and said, "What is the matter with this Begonia?" I just checked myself from saying everything including yourself, and saw, even without my specs, that it fairly wriggled with aphids, was quite dry, and

hopelessly overpotted, and I voiced those symptoms diplomatically, and the lady said, "Oh, I never noticed." That was an easy time I did not have to draw on my imagination as is sometimes the case, the very most difficult are those without examples but voluminous explanations that don't explain but hopelessly befog. There is always a way out, the one I take myself, the sovereign prescription, which is to dispose of any plant that is definitely sick at once and completely. And then there is that wonderfully comprehensive alibi, Nematodes, which I am introducing now to tell of a personal experience. Nearly two years ago one of my tall Rubras began to fail, it hung its leaves and then dropped them and its stems withered. When the main stalk started to go black at the base I gave it a yank and it came out of the ground as if relieved that it was all over. Its few remaining roots were nobby and my heart missed a beat or so as "Nematodes" intruded on my understanding. I got the microscope and nearly blinded myself seeking the villain but it eluded me. Then I resolved on an experiment, I put another Rubra back in the same hole, and here is the crux of the whole thing, today, at least eighteen months after, that Rubra is as handsome a one and as healthy a one as I ever saw. The Rubra family has a constitutional indignation that expresses itself in root decay, moreover it is not a long lived kind, the Coralline Lucernes and President Carnots that have been twenty years and more in my lathhouse have no Rubra contemporaries.

I have wanted to do it for a long time but fear of ridicule has put me off, but now I am trying Nasturtiums in hanging baskets for dry hot situations, in this case under a pergola where there is run and wind. I selected plants with variegated foliage and the colored blooms I liked, and I am satisfied that I am going to be the one to laugh, though the experiment is young the effect has already been worth the trifling effort. Constant pruning and deseeding will be necessary and not too much water.

This seems to be a tuberous year, never in my experience have they been so early or so vigorous, I am having to put a large number of them into seven-inch pots and they are almost shrubs. Three things may have a lot to

do with this. The season, the new house that I built for them with red rock terraces, and the regular use of Floranid. It has been suggested that the red rock, of which there is a great deal, stores heat during the day and gives it out at night, like the bee with its honey, and it is a fact that the largest and finest specimens are in this rocky locality. Our potting compost has been richer than in former years.

I am convinced that we, in this delectable Southernmost California, fail to arrange a sane menu for our garden plants. We prepare our beds in the winter digging in a more or less generous amount of fertilizer and mentally say, "That's that," and dismiss plant food from our minds for a year. During our dry summers we water generously and often and every time we do so we carry a certain amount of plant food in solution to the depth to which our moisture penetrates, which, and this is the main point I want to make, is often below the reach of our shallow rooting growths. The cultivation, by which I mean the whole process of growing; forced upon us by our climate is a process of leaching and, for surface rooting things, fertilizing once a month is indicated.

I am preaching what I practice, and since I have used a liquid fertilizer every month through the summer on beds, every two weeks for potted stuff, a very marked improvement has been evident. As bearing on this subject it should be said for the millionth time, plants can only feed on material in solution, they do not gnaw bones like a dog, therefore only fertilizer applied in liquid form is immediately available.

Perhaps you have heard that now we have a law under which the originator of a new plant can patent it and reserve the right to propagate the same for seventeen years. I have been getting information about this and am a bit discouraged, for it would seem to be distinctly cheaper not to do it. Here is a preliminary sketch of expenses. Preliminary Search \$15, Filing Fee Patent Office \$25, Final Fee Patent Office \$25, Attorney's Fee \$75 to \$100. Drawings \$15 to a lot more, according to how you do them, in black and white or water color. I don't see any plant of mine standing up under that burden. Plant men generally seem to be very dubious about this law, they ask how are you going to enforce it? It looks like one of these polite gestures that don't mean much, a sort of "Good luck to you," when what you need is a square meal.

My punctuator has something more important to do than to put in those little bacilli here and there so I have sprinkled around what I consider an adequate number and can only hope they will do no harm.

THE CHILE SOAP BARK TREE

In 1880 on the grounds of the State University at Berkeley, Calif., there stood a slender, graceful evergreen tree, with a trunk at least six inches in diameter. Its leaves were small, smooth and shining, resembling the native live oak in size. It was of special interest being the soap bark tree of Chile and botanically *Quillaja Saponaria*, so named from the Chilean word *quillean* meaning to wash. At that time I thought what a good avenue or sidewalk tree it would make.

In 1915 I secured two trees and planted them on my Pacific Beach hillside. They grew and were promising—but later on their care was neglected for many years, they continued to live and grew bushy rather than tall. Last year one of the trees, which had received some care the past few years bore seed, which I planted and now I have young plants four to six inches high.

Also last year I found for the first time and bought eight plants six feet tall from a Pasadena Nursery. They looked neglected but now after pruning and care they are promising plants in wooden tubs.

The plant that bore seed last year has had some extra care and today it was in full bloom, from top to bottom, every branch end full of clusters of small white flowers about two-thirds of an inch in diameter and its sepals as conspicuous as the petals, each flower has a decided star-like appearance and they are arranged in clusters about three inches in diameter, it is a very attractive plant.

Knowing how these two trees have lived with no care for so many years and knowing the general habit of the tree from the old plant at Berkeley, I feel very sure it will make a desirable parking tree and I shall hope to see at least one street in Pacific Beach planted with it.

The bark contains saponin, an alkaline compound which makes it useful as a soap. Pulverized bark in small packages is now sold in all drug stores and is universally used the world over.

It can be grown by cuttings as well as by seed when properly managed.

The flowers of the native *Ceanothus* have this same quality of making a good soapy lather for the hands and was known as the soap bush by the Indians.

If any of these Chile Bark trees are conspicuous by their success in Southern California and known to any reader of this article a report of same and their location will be greatly appreciated.

—K. O. Sessions.

GARDEN PROBLEMS

By Walter S. Merrill

Almost every newcomer from the East, on finding himself at last possessed of a house and a plot of ground in California, wonders rather vaguely what he is going to plant. He looks at other gardens, asks the names of plants which appeal most to him (names which he proceeds to forget immediately), goes to nurseries and wanders about therein, and finally buys a lot of trees and shrubs in tin cans, which the favored nurseryman happens to sell to him for any of a variety of reasons. Then he takes them home, plants them himself or with the aid of a gardener (oftener than not a gardener in name only), or gets the nurseryman to do the planting.

Almost at once the things begin to grow—in most cases surprisingly well—and the yard soon takes on a more finished, more homelike and livable appearance. Water and fertilizer are applied more or less regularly and properly, pruning is done with or without skill, and the result is called "the garden." And this result is almost always astonishingly good, considering the small amount of knowledge of the gardening art and of feeling for plants that has gone into its making.

As a decoration for the home, or a frame for the picture, it does very well. Most of the houses in Southern California are in dire need of decoration, and any sort of planting that will grow will add a setting of green and a softening of the hard lines that is very pleasing.

But such planting is not in any sense a garden. It is very difficult to define the term "garden" in a way that will satisfy the real garden lover. It must have color and line, i. e., design, that express the owner's love for beauty. It must be in such intimate relation to the house that it seems livable and lovable. It need not be especially neat nor perfectly kept; a few weeds do not necessarily mar its beauty; the flower beds cannot be expected to be in full bloom all the time; it is not essential that it be always swept and dusted and ready for a party. But it must be comfortable and interesting to browse about in, with benches or chairs here and there to rest the visitor. There should be some interesting flowers in bloom all the time, and a comfortable way to enjoy them. There should be sunny parts and shady parts, and care should be taken to choose suitable plants for these

different conditions. There should be a little water, at least, visible somewhere, and one or more good sized trees. And, however small the plot, parts of the garden should be screened from other parts, to add a slight spice of adventure to any visit to it.

Endeavor to keep the proportions right in the garden. This can be done only by taking great care in what you purchase, and in the spacing of the small plants as they come from the nursery. Ask the nurseryman where you can see fine, full-grown specimens of each thing you buy,—and then visit them and study them, and visualize as well as you can what they will look like in their respective positions in your garden. I have seen *araucaria excelsa* (Norfolk Island Pine) of tiny size planted with its stem less than two feet from a house. I have seen *eugenia myrtifolia* and Italian Cypress planted under broad, low eaves. I have, myself, planted Monterey Pines so close to a cypress hedge that they had to be cut down after four years. And I have had to change twice in the same time a path near a redwood tree that has made phenomenal growth. We all make the mistakes of planting too closely and of planting ill-chosen and unharmonious varieties as neighbors. But when a mistake has been discovered, do not delay in digging up the offending member of your community of plants. The love of flowers must be tempered by Spartan hard-heartedness when the question arises of doing away with the undesirables.

If you feel that you really love and understand flowers and gardens, make your own as you wish to have it, and pay no heed to the friend or neighbor who would have it different. It is your own garden, and to have character itself it must reveal yours. As a mere framework for the house, almost any sort of conventional planting will serve for the enjoyment of the passers-by; but your garden is for your own joy, and it should so reflect your own appreciation of the beauties in nature that it will give you pleasure in ever increasing measure.

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SAN DIEGO'S PLACE ON THE MAP

Fidella G. Woodcock

San Diego Natural History Museum

San Diego was born in a dry country and the natural life of its environments shows that its plants and animals have been fitted for many ages both to survive and to invite the flora of similar countries into its gardens.

The nearest American ally in dry soil conditions is Chile, a narrow sandy shore of the Pacific in the southern continent, and closely linked with Chile is Peru, the home of the *Cereus*, the *Calonyction*, a moon-flower of rare beauty and some of the world's most important food producing species the *Nightshades* from which we have fallen heir to the potato, our almost indispensable tomato, and the ornamental *cestrums* of nocturnal habit.

The geographic distribution of these plants that tolerate dry soil and the day-time heat from which they expand into the reversed winds of the South Sea in the afternoon is evidently caused by the Peruvian Current that affects in its northward course the climate of western South America.

Under the expansive heated waters of the Equator this current is a mighty river in middle ocean and forces its way north as an undertow to our shore line of the Pacific. Some writers claim that from its origin near the South Pole it is a potent cause of the swinging of South America like an oscillating pendulum, affecting the distribution of coconuts from the plateau country by means of the mighty rivers into the reach of the tides.

Being of polar origin the Peruvian current is the reason of being of our cool southwest Trade Winds that rule the temperature of this part of the world.

And the cold from this current in the day when the winds blow from the American Plateau is enough to deflect the moisture of the Japan Current of equatorial origin that is warmer. As the ocean winds reverse in the afternoon our sleeping plants that for the most part are partly dormant by day, even in the wild, are ready to receive their draught of wind laden with moisture at vesper-time hours.

Mirabilis, the Four O'clock, and *Oenothera*, Evening Primrose are of an order including a large number of kindred species of the strongest family of seed-producing plants that we have.

The *Fuchsia* so graceful and brilliant is originally a wild flower of Chile and is a genus of the Evening Primrose family. But it is both tropical and sub-tropical extending in various forms along the length of the Pacific Coast. It is the characteristic of the sand-abiding species to conserve their strength for night-blooming. All of the species that I have mentioned are of this type, their flowering time is at

night that gives an advantage. Vegetation and conserving energy are created by the "velo" cloud (veil) of the "high fog," that acts as a mantle in the hidden, unabsorbed rays of the night ions.

NOTES ON NATIVES

MIMULUS

By Mrs. H. W. Johnson

MIMULUS (Latin, a little mimic, from the grinning flowers.) This is the well known Monkey Flower, as it is known to many. An herbaceous shrub, of both perennial and annual varieties, and valuable in the cultivated garden or in a neglected spot.

There are numerous varieties of *Mimulus*, the best of them for us being in the perennial grouping, with a color range from pale buff to wine red, with canary yellow, bright red, mahogany, brown and other shades in between. You will, therefore, if you thirst for *Mimulus* in your garden, be able to make a choice that will fit nicely into any color scheme you may have in mind.

If you have ever pursued the *Mimulus* to its lair you will have observed that the finest specimens are to be found blooming on the North side of some larger clump of native vegetation. Let this fact, then, guide you in placing *Mimulus* in your garden. Give it as much protection from sun as possible, usually by permitting it to cuddle in the friendly shelter of some larger bush. Then, if watered occasionally, it will bloom practically the year around, and the more kindly its treatment, the larger will the blooms be. It would be well to rest the plant for a month or six weeks by withholding water, beginning about September 1st, or it will bloom itself to death in two or three seasons, while if protected from itself it will live and bloom for years. Of course, if used as a filler on a canyon side where it has no water, it will bloom only through the spring and summer months, after which it will take on a brown and dusty look, reviving promptly with the first rains. In the garden it is well to cut the plant back rather severely at the beginning of its resting period. This will insure a clean, healthy looking plant with plenty of bloom wood when watering is resumed.

Mrs. Lulu B. Rivers, an able and enthusiastic gardener of Santa Monica, now on a trip abroad, writes from Spain, May 22, as follows:

Southern Spain is lovely in April and May. I find, however, there is not the variety that we have in flowers, trees and shrubs, so am somewhat disappointed. I love the fine avenues and forests of trees in and near La Granada and Madrid.

—K. O. Sessions.

PALEONTOLOGIST AT U. C. FINDS OREGON TREES IN TROPICS

BERKELEY, May 7.—R. W. Chaney, honorary curator of the paleontological collection of the University of California, has just returned from a trip to Central America which resulted in the discovery that trees similar to those which grew in Oregon and probably in California perhaps more than 20,000,000 years ago, are now living in the tropics, in fact make up a considerable part of the forests of that district.

Dr. Chaney was led to make an investigation of this theory through study of leaf fossils found in Eocene epoch rocks of Oregon. These fossils, which appear as fresh as if they had dropped from the tree a few months ago, though they have been encased in solid rock for millions of years, looked very much like the leaves of certain living hardwood trees; so Dr. Chaney visited Central America, studied specimens at the Barro Colorado Tropical Laboratory in the Canal Zone and elsewhere, and succeeded in identifying 40 species which have descended from those of Eocene times with very little if any change.

This discovery, Dr. Chaney points out, offers incontrovertible proof that Oregon and probably California were much warmer then than now, and that this warm period was followed by a cyclical cold period which caused a gradual migration of the northern boundary of these tropical-type flowering plants, southward. The general type of trees involved is represented by such commonly known individuals as the magnolia, fig and laurel.

Such cyclical changes in the temperature of various latitudes on the earth, judging by the evidence of fossils in rocks, have not been rare, Dr. Chaney says, and are probably still continuing. Whether the earth is now headed for another cold period or is still to experience warmer temperatures before a cold period, is not definitely known.

These cyclical changes, there is evidence to show, have been going on for at least a billion years, since pre-Cambrian times. There were great ice ages in several periods of the earth's history and lesser ice ages in between them, such as during the comparatively recently Pleistocene epoch, when ice sheets descended over a great part of what is now the United States.

An adequate explanation of cyclical changes in temperature on the earth has never been offered. The fact that they existed runs counter to the theory that the sun has shown steadily but with gradually decreasing brilliance. Under such a theory it is difficult to explain the presence of ice sheets, particularly those occurring in what is now tropical latitudes, and nowhere else.

AT HOTEL LA MORADA

Here piled up pyramids of purple hills
Enshadow haciendas snowy white
And rows of citrus trees, their emerald hue
Perpetual.
Tall eucalypti lift their spires aloft
O'er lawns of summer-green and winter's
brown.
Twain cotoneaster trees, half-smothered by a
Honeysuckle vine,
Flaunt their red-berried branches—
A challenge to the poinsettias' coronets
Of scarlet glory
And the cactus-dahlia's golden
Yellow.

And, remotely aloof, the beauty of
One lovely, lone
Delphinium spine.

—Frank L. Judd.

Inspired by the view looking east from La Morada Guest House, Rancho Santa Fe, December, 1929.—Ed.

SAN DIEGO county boasts of having the OLDEST KNOWN living pear tree in existence in NORTH AMERICA, and perhaps of the continent, that still bears healthy and luscious fruit, with its production the same year in and year out.

The tree is at Warner Hot Springs. It is known as the Mission pear tree and is about 142 years old, its history coming down in Indian legends.

The legends state that Franciscan monks planted the tree in the time of the Santa Ysabel mission, which is near by. There are a few instances on record in this state where pear trees have lived to be 75 years old, but are now broken down. Several trees have been found to be of that age in Bell valley, in Napa county, on the Platte ranch.

Nut trees have a longer life and bear good crops. This Mission pear tree will seemingly match the life of some of the nut trees at Warner.—San Diego Union.

WATER LILLIES

35 Varieties

MRS. W. S. THOMAS

1616 Cypress Street

Patronize the Garden Advertisers.

THE MISSION BELLS OF RANCHO SANTA FE

By Ruth R. Nelson

Let those who have been saddened by the belief that San Diego County's Mission Bell tulips (*Fritillaria biflora*) have almost disappeared, make a note of the fact that myriads of these quaint little chocolate lilies are blossoming every year at Rancho Santa Fe, where their presence is well-known and thoroughly appreciated by those who live there.

During its short blossoming season this past spring Mission Bells were reported growing in seven widely separated areas, where they have evidently been blossoming unnoticed until now, when the grown-ups, as well as the children, have taken the trouble to search for these inconspicuous chocolate lilies which were doubtless ringing their modest Mission bells on this land long before a certain gringo settler presented them with this suggestively beautiful name.

The fritillaries at Rancho Santa Fe have a way of outdoing even Carl Purdy's catalogue descriptions. In one vicinity where a veritable army of them appears each year, they are growing in a sticky clay meadow, well-drained and sunny, which provides a marvelous succession of blossoms for months, beginning with native grasses, the wavy leaves of the soap-plant, shooting stars and brodiaeas, then proceeding on through the flower program of lupins, aliums, the sturdy camassias, larkspurs, lilac mariposas, harvest brodiaea and golden stars, ending with vivid erythraeas scattered among the dried grasses and brown-edged yellow mariposas fluttering their lily-silk tulip petals well above the tangled thistles and low bushes on the hillside, while tall stalks shoot up suddenly from the wilted soap-plant, and bedeck their slender branches with dainty flowers that twinkle there like fairy lanterns.

We have made repeated attempts to transplant fritillarias into our ranch gardens, but without any success whatever. Their habit of growth which does not allow them to blossom each year, means that one is kept waiting an indefinite number of seasons for results, and convinces us that this is a native flower which will never be cultivated extensively.

Neither is the fritillaria ornamental when in the house. So then, our chief reason for loving them, is that they are rare, and that they go about the business of flowering so inconspicuously that they escape notice. The particular meadow which has been described being an example of this. It is situated where many people pass near it continually, yet very few know when the Mission Bells are blossoming there. Sad to say, when these meadows are eventually developed, another Mission Bell area will be lost to California.

RAINFORD FLOWER SHOP



Cut Flowers
Floral Designs

1115 Fourth Street

San Diego

In a number of other places on the rancho, however, fritillarias are growing along the edges of orchards where it can be hoped that a few will survive, especially now that they have been marked there. On the borders of the Hammond Whitsitt orchard the children discovered a group, last season, which showed the astonishing effect of the irrigation seepage. Instead of the usual slender stems with from two to six blossoms, these stalks shot up fifteen or eighteen inches and bore columns of bells which kept opening for weeks. One curious stalk which was brought to the writer (well-known at the rancho as a Mission Bell fanatic) was a freak which appeared to be two stems in one, broad and flat, with a groove which extended even to the blossom cluster at the tip. Fifteen bells opened on this leafy stalk before they began to wither, and there was a cluster of seven green buds still unopened when it was thrown away. This would have been a museum specimen, had the children understood the way it should have been gathered.

In a certain lovely wild garden which gave infinite pleasure to a number of San Diego children until its vicinity was inevitably overgrown by the city's progress (even before the gathering of wildflowers was restricted) there was a shallow rocky plot where a few choco-

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late lilies appeared each season. This little hollow lay in the full sunshine near the top of a ridge both sides of which there were veritable gardens of shooting stars and yellow violets, intermingled with silver-back ferns, clematis, a few brodiaeas and Indian paint brushes. Enough flowers to bring many children scampering over the hillside every day of the flowering season.

Yet this small chocolate lily bed seemed to remain practically unknown. Even to this day, the thrilling experience of secretly watching those little, precise, green buds unfold, while the staunchly slender stems arched daintily to ring their chocolate bells . . . this remains one of the treasured memories of childhood which doubtless keeps the San Diego Mission Bell lily forever intrenched in the writer's mind as one of the most interesting of our native flowers. Not even the fields of tall stemmed ones which have been seen at Rancho Santa Fe can equal the picture left in the mind from those early days when the fritillaria was known to us only by that name which endears it to all children, the "chocolate lily."

PARKS AS I KNOW THEM

By C. I. Jerabek

"Where is Balboa Park?" usually the first question asked by the tourists. And why is this? Largely because here there have been planted trees, shrubs and plants from all over the world. Mr. J. G. Morley, Superintendent of Parks, has kept them in groups, and a rotation of bloom continues the year round. In some parts the vegetation is as dense as any jungle and in others there are beautiful flower beds or spacious lawns with trees or palms scattered about. Balboa Park is a veritable paradise for the botanist and the horticulturist.

It would be impossible for lack of space to tell about the thousands of plants that are

grown here, so I will mention a few by families. The shrubs in this article are in the Myrtaceae family and are commonly called bottle brushes from the cylindrical shape of the flower clusters.

Melaleuca Huegelii (sometimes called *imbricata*) has leaves resembling fish scales, light green, flowers white, a thick, compact shrub when young.

M. ericifolia has leaves linear like the heather, flowers yellowish white, bark soft.

M. armillaris is a graceful shrub with pendulous branches, soft needle-like foliage and in the spring spikes of white flowers about three inches long. A group of them can be found southeast of the Sixth Street Aviary. In this same planting are some fine *Huegelii*, *ericifolia*, and *stylioides*.

M. hypericifolia with oval, flat leaves, opposite and slender, dull green in colour resembling St. John's-wort, but the flowers are orange scarlet usually inside of the bush. Some good shrubs may be seen along the Prado east of the California Building.

M. nesophila (sea loving) has small, oblong, glossy leaves of a bright green. The flowers are about an inch long, of a deep lavender shade. A group of these are on the east side of the driveway leading to the Girl Scouts' Building.

M. leucadendron (silver or punk tree) has leaves oblong, about two inches in length, silvery, flowers creamy white, bark thick and spongy. This can be separated in thin sheets like tissue paper; reminds one of Birch bark. There are some of these trees here and there among the shrubbery along the west side of Twelfth Street, also a fine grove of them near Pershing Drive and Arizona Street. Another tree with a similar bark is *M. stylioides*, a small-leaved variety. Leaves about one-quarter inch, slightly twisted, with a very sharp point, creamy white flowers. A large group of these fine trees are along the bank south of the Natural History Museum.

And then there are the *Callistemon lanceolatus* hybrids (sometimes called *melaleuca*) which come in cream, salmon, yellow, and all shades of red. After these shrubs bloom they should be pruned heavily as the new growth is as pretty as the flowers, coming in delicate shades of pink and bronze. There is a fine planting along the west approach to Cabrillo bridge; also on the rim of the canyon south of the Montezuma Gardens.

Callistemon rigidus is a stiff branched shrub with narrow leathery leaves, flowers deep red about five inches long. There are about twenty fine shrubs along Twenty-eighth Street near Ash.

Metrosideros tomentosa, called the New Zealand Christmas tree because it generally blooms around the Yuletide. Its oval leaves are gray and downy underneath (often mistaken

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for *Pittosporum crassifolium*) a very ornamental tree. There is one at the side of the walk near Seventh and Juniper Streets.

Along Quince Street hill, east of Sixth Street, you will see some shrubs that at a first glance might be taken for *Melaleuca*. They are *Calothamus quadrifidus*. The foliage is deep green, needle-like, about three-quarters of an inch long, flowers a deep red, cylindrical, very imperfect, only part way round.

A Bit of the Tropics

One of the showiest and most gorgeous of all the small flowering trees of the Tropics is the *Bauhinia*. There are a number of different types of *Bauhinias*, most of them too tender to plant in California. *Bauhinia purpurea*, however, is sometimes found. We recently discovered a small *Bauhinia* in one of the inland towns of Southern California which seems to be related to *B. purpurea* but which we cannot absolutely identify. The flowers are largely pink shading to purple and yellow. The tree blooms when quite young, and since the original tree observed is not in a particularly warm situation, it would seem that it would stand all the cold weather that we would have in most parts of Southern California. *Bauhinias* are often called Orchid Trees, and, indeed, their large, showy flowers borne in great clusters are suggestive of the Orchid. Sometimes they become only medium-sized shrubs but often grow into small trees. The leaves of the *Bauhinia* are divided into two parts, being heart-shaped with a deep cleft in the middle, and this twin leaflet appearance is followed out in the name *Bauhinia* for the tree is named after John and Casper Bauhin, twin Sixteenth Century herbalists.

Some New Crape Myrtle

Almost everyone in California is familiar with the bright colors of the Crape Myrtle, those showy, large shrubs, or small trees, which are in bloom in the late summer. However, most of us are familiar with the bright pink shade and watermelon red variety. Some other colors are now available however, and some of them very lovely indeed. One is the Dwarf Red Crape Myrtle, which has a deeper shade of red than the common form and in addition has a more compact growth. It is much more valuable for planting where large size is not desired, and it blooms so that the entire plant is a mass of color. The Dwarf Blue is an even more valuable variety which grows only to about eight or ten feet and has lovely lavender-blue flowers of the most attractive shade. There is nothing new about the White Crape Myrtle, but still it is not seen very often because it is rather difficult to propagate. The flowers

are very delicate and lovely, however, being snowy white, sometimes with a slight tinge of pink at the outer edges. Then, there is a tall-growing sort with pure lavender flowers which will be admired by many. There are few other trees or shrubs which will give the great wealth of color provided by the Crape Myrtle.

FARMING WITH PAPER MULCH MAY CUT COST

San Diego.—This district has two experiments in farming under paper, a practice that has proven profitable in the Hawaiian Islands, it is said, and the United States Bureau of Plant Industry is now endeavoring to learn how far the practice may be extended to California agriculture.

In the Herbert Chase nursery at Escondido, wistaria seed planted under paper mulch on March 23 had produced plants thirty inches high by July 16, while seed from the same package planted on the same day but without paper mulch produced only eleven inches tall, notwithstanding the aid of weeding and cultivation. At Encinitas Thomas McLoughlin has had excellent results growing daffodils without cultivation. He used mulch paper, too.

The results of these two experiments point a way to some farm relief in reducing the high cost of labor, both the nurseryman and the bulb grower point out; for after the ground is planted, no cultivation is required and, too, there is a saving of both heat and moisture, they say.

JULY WEATHER IN SAN DIEGO

By Dean Blake

It is usually about the first of July that summer begins in San Diego. Although cloudiness continues along the coast during the night and early morning hours, it does not extend inland any great distance. Temperatures in the littoral districts are mild and equable, never uncomfortably high or low, and are greatly tempered by the prevailing northwest winds from off the ocean. On one day only does the record show a maximum temperature above 90 degrees during July.

However, back from the coast, warm, dry weather prevails, and temperatures are generally high. Sonora storms also are common in the higher elevations, where thunderstorms during their prevalence are sometimes severe.

Ordinarily no rain falls in the city during the month; the sunshine averages about 67 per cent of the possible; high winds are unknown and both relative and absolute humidity are higher than at any other period of the year.

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